## WHAT IS CLAIMED IS:

1	A method for adding a participant to a
2	conference call, said method comprising:
3	in response to a multipoint controller receiving a
4	request to extend an invitation to an ongoing
5	conference call to a first terminal:
6	establishing a Call Optimization Application
7	(COA) channel between a Multipoint
8	Controller-Call Optimization Application
9	(MC-COA) and a Call Optimization
10	Application co-resident with the first
11	terminal (Terminal-COA), said establishing
12	a COA channel effected via instant
13	messaging following an address resolution;
14	exchanging cost information data between the
15	Terminal-COA and the MC-COA;
16	determining an optimal media transport channel
17	origination strategy in response to the
18	cost information data;
19	sending the Terminal-COA an invitation to join
20	the conference call, said invitation
21	having associated information consonant
22	with the optimal media transport channel
23	origination strategy;
24	receiving, with the MC-COA, a message from the
25	Terminal-COA containing human user input
26	received in response to the invitation to
27	join; and
28	responding to the message containing the human
29	user input.

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`1	<ol><li>The method of Claim 1, wherein said</li></ol>
2	establishing a Call Optimization Application (COA)
3	channel further includes:
4	obtaining a connection address of the terminal to be
5	added; and
6	associating the connection address with a non-media-
7	transport-channel-supporting connection
8	address, wherein the non-media-transport-
9	channel-supporting connection address includes
10	an instant messaging service identifier.
1	3. The method of Claim 1, wherein said
2	establishing a Call Optimization Application (COA)

1 4. The method of Claim 1, wherein said exchanging 2 cost information data between the Terminal-COA and the 3 MC-COA further includes:

establishing an instant messaging connection.

- gathering, with the Terminal-COA, cost information related to the first terminal originating the media transport channel.
- 5. The method of Claim 1, wherein said exchanging cost information data between the Terminal-COA and the MC-COA further includes:
- gathering, with the MC-COA, cost information related to the multipoint controller originating the media transport channel.
- 1 6. The method of Claim 1, wherein said exchanging 2 cost information data between the Terminal-COA and the 3 MC-COA further includes:

channel further includes:

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4	sending, over the COA channel, cost information
5	related to the first terminal originating the
6	media transport channel.

7. The method of Claim 1, wherein said determining an optimal media transport channel origination strategy in response to the cost information data further includes:

the multipoint controller comparing cost

information.

- 8. The method of Claim 1, wherein said sending the Terminal-COA an invitation to join the conference call, said invitation having associated information consonant with the optimal media transport channel origination strategy further includes:
- sending a request that the first terminal originate
  a media transport channel with the multipoint
  controller, if it has been determined to be
  most cost effective for the first terminal to
  originate the media transport channel.
  - 9. The method of Claim 1, wherein said sending the Terminal-COA an invitation to join the conference call, said invitation having associated information consonant with the optimal media transport channel origination strategy further includes:
  - sending a request that the first terminal originate
    a media transport channel with the multipoint
    controller, unless specific instructions not to
    send the request have been received.
- 1 10. The method of Claim 1, wherein said sending the 2 Terminal-COA an invitation to join the conference call,

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3	said invitation having associated information consonant
4	with the optimal media transport channel origination
5	strategy further includes:
6	sending a token having at least one field selected
7	from the group comprising a token ID field, a
8	conference ID field, a network address field, a
9	password field, a call initiator field, and an
10	other conference call participants' names
11	field.

- 11. The method of Claim 1, wherein said receiving, with the MC-COA, a message from the Terminal-COA containing human user input received in response to the invitation to join further includes:
- 5 receiving a message that the human user has rejected 6 the invitation.
- 1 12. The method of Claim 1, wherein said responding 2 to the message containing the human user input further 3 includes:
- sending a message from the MC-COA to the multipoint controller informing the multipoint controller that the invitation to join the conference call has been rejected.
- 1 13. The method of Claim 1, wherein said receiving,
  2 with the MC-COA, a message from the Terminal-COA
  3 containing human user input received in response to the
  4 invitation to join further includes:
- receiving a message that the human user has accepted the invitation to join but has declined a request to initiate a media transport channel.

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L	14. The method of Claim 13, wherein said responding
2	to the message containing the human user input further
3	includes:

4 sending a message from the MC-COA to the multipoint controller informing the multipoint controller 5 that the multipoint controller is to originate 6 7 a media transport channel with the first 8 terminal, in response to the message that the 9 human user has accepted the invitation to join but has declined a request to initiate a media 10 11 transport channel.

15. The method of Claim 1, wherein said receiving, with the MC-COA, a message from the Terminal-COA containing human user input received in response to the invitation to join further includes:

receiving a message that the human user has accepted the invitation to join and has accepted a request to initiate a media transport channel.

1 16. The method of Claim 15, wherein said responding 2 to the message containing the human user input further 3 includes:

sending a message from the MC-COA to the multipoint

controller informing the multipoint controller

that the first terminal will be calling in "as

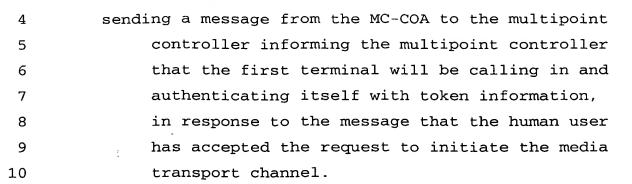
if" first terminal were joining a "meet-me"

conference call, in response to the message

that the human user has accepted the request to

initiate the media transport channel.

1 17. The method of Claim 15, wherein said responding 2 to the message containing the human user input further 3 includes:



1 18. The method of Claim 17, wherein the token 2 information is unique to the first terminal and provides 3 a security mechanism such that access to the conference 4 call is controlled.

1	19. The method of Claim 15, wherein said responding
2	to the message containing the human user input further
3	includes:
4	sending a message from the MC-COA to the multipoint
5	controller informing the multipoint controller
6	that the first terminal will be calling in and
7	authenticating itself with token information,
8	and that the first terminal desires to bill the
9	call against another entity, in response to the
10	message that the human user has accepted the
11	request to initiate the media transport
12	channel.

1	20. A system comprising:
2	means, responsive to a multipoint controller
3	receiving a request to extend an invitation to
4	an ongoing conference call to a first terminal
5	for:
6	establishing a Call Optimization Application
7	(COA) channel between a Multipoint
8	Controller-Call Optimization Application
9	(MC-COA) and a Call Optimization
10	Application co-resident with the first
11	terminal (Terminal-COA), said means for
12	establishing a COA channel effected via
13	instant messaging following an address
14	resolution;
15	exchanging cost information data between the
16	Terminal-COA and the MC-COA;
17	determining an optimal media transport channel
18	origination strategy in response to the
19	cost information data;
20	sending the Terminal-COA an invitation to join
21	the conference call, said invitation
22	having associated information consonant
23	with the optimal media transport channel
24	origination strategy;
25	receiving, with the MC-COA, a message from the
26	Terminal-COA containing human user input
27	received in response to the invitation to
28	join; and
29	responding to the message containing the human
30	user input.
1	21. The system of Claim 20, further comprising:
2	a network server computer having the system; and

3	said network server computer including at least one
4	processor and at least one memory.
1	22. The system of Claim 20, wherein said means for
2	establishing a Call Optimization Application (COA)
3	channel further includes:
4	means for obtaining a connection address of the
5	terminal to be added; and
6	means for associating the connection address with a
7	non-media-transport-channel-supporting
8	connection address, wherein the non-media-
9	transport-channel-supporting connection address
10	includes an instant messaging service
11	identifier.
1	23. The system of Claim 20, wherein said means for
2	establishing a Call Optimization Application (COA)
3	channel further includes:
4	means for establishing an instant messaging
5	connection.
1	24. The system of Claim 20, wherein said means for
2	exchanging cost information data between the Terminal-COA
3	and the MC-COA further includes:
4	means for gathering, with the Terminal-COA, cost
5	information related to the first terminal
6	originating the media transport channel.
1	25. The system of Claim 20, wherein said means for
2	exchanging cost information data between the Terminal-COA
3	and the MC-COA further includes:
4	means for gathering, with the MC-COA, cost
5	information related to the multipoint
6	controller originating the media transport
7	channel.

1	26. The system of Claim 20, wherein said means for
2	exchanging cost information data between the Terminal-COA
3	and the MC-COA further includes:
4	means for sending, over the COA channel, cost
5	information related to the first terminal
6	originating the media transport channel.

- 27. The system of Claim 20, wherein said means for determining an optimal media transport channel origination strategy in response to the cost information data further includes:
- 5 means for the multipoint controller to compare cost 6 information.
- 28. The system of Claim 20, wherein said means for sending the Terminal-COA an invitation to join the conference call, said invitation having associated information consonant with the optimal media transport channel origination strategy further includes:
- means for sending a request that the first terminal
  originate a media transport channel with the
  multipoint controller, if it has been
  determined to be most cost effective for the
  first terminal to originate the media transport
  channel.
  - 29. The system of Claim 20, wherein said means for sending the Terminal-COA an invitation to join the conference call, said invitation having associated information consonant with the optimal media transport channel origination strategy further includes:

    means for sending a request that the first terminal originate a media transport channel with the

multipoint controller, unless specific

9	instructions not to send the request have been
10	received.
1	30. The system of Claim 20, wherein said means for
2	sending the Terminal-COA an invitation to join the
3	conference call, said invitation having associated
4	information consonant with the optimal media transport
5	channel origination strategy further includes:
6	means for sending a token having at least one field
7	selected from the group comprising a token ID
8	field, a conference ID field, a network address
9	field, a password field, a call initiator
10	field, and an other conference call
11	participants' names field:
1	31. The system of Claim 20, wherein said means for
2	receiving, with the MC-COA, a message from the Terminal-
3	COA containing human user input received in response to
4	the invitation to join further includes:
5	means for receiving a message that the human user
6	has rejected the invitation.
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1	32. The system of Claim 20, wherein said means for
2	responding to the message containing the human user input
3	further includes:
4	means for sending a message from the MC-COA to the
5	multipoint controller informing the multipoint
6	controller that the invitation to join the
7	conference call has been rejected.

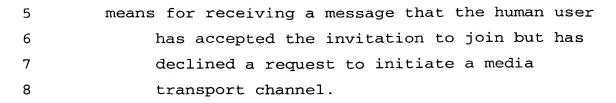
The system of Claim 20, wherein said means for 1 33. receiving, with the MC-COA, a message from the Terminal-2 3 COA containing human user input received in response to 4 the invitation to join further includes:

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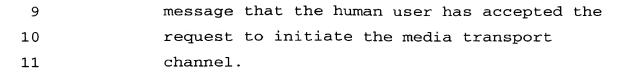
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- 34. The system of Claim 33, wherein said means for responding to the message containing the human user input further includes:
- 4 means for sending a message from the MC-COA to the multipoint controller informing the multipoint 5 6 controller that the multipoint controller is to 7 originate a media transport channel with the 8 first terminal, in response to the message that 9 the human user has accepted the invitation to 10 join but has declined a request to initiate a 11 media transport channel.
  - 35. The system of Claim 20, wherein said means for receiving, with the MC-COA, a message from the Terminal-COA containing human user input received in response to the invitation to join further includes:
  - 5 means for receiving a message that the human user
    6 has accepted the invitation to join and has
    7 accepted a request to initiate a media
    8 transport channel.
  - 36. The system of Claim 35, wherein said means for responding to the message containing the human user input further includes:
  - means for sending a message from the MC-COA to the
    multipoint controller informing the multipoint
    controller that the first terminal will be
    calling in "as if" first terminal were joining
    a "meet-me" conference call, in response to the



- 37. The system of Claim 35, wherein said means for responding to the message containing the human user input further includes:
- means for sending a message from the MC-COA to the
  multipoint controller informing the multipoint
  controller that the first terminal will be
  calling in and authenticating itself with token
  information, in response to the message that
  the human user has accepted the request to
  initiate the media transport channel.
- 38. The system of Claim 37, wherein the token information is unique to the first terminal and provides a security mechanism such that access to the conference call is controlled.
  - 39. The system of Claim 35, wherein said means for responding to the message containing the human user input further includes:
- 4 means for sending a message from the MC-COA to the 5 multipoint controller informing the multipoint controller that the first terminal will be 6 7 calling in and authenticating itself with token 8 information, and that the first terminal 9 desires to bill the call against another 10 entity, in response to the message that the 11 human user has accepted the request to initiate 12 the media transport channel.

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1	40. A method for adding a participant to a
2	conference call, said method comprising:
3	in response to a multipoint controller receiving a
4	request to extend an invitation to an ongoing
5	conference call to a first terminal, attempting
6	to establish, via instant messaging services, a
7	Call Optimization Application (COA) channel
8	between a Multipoint Controller-Call
9	Optimization Application (MC-COA) and a Call
10	Optimization Application co-resident with the
11	first terminal (Terminal-COA).

41. The method of Claim 40, wherein said attempting to establish, via instant messaging services, a Call Optimization Application (COA) channel further comprises: determining that the COA channel cannot be established; and informing the multipoint controller that Call Optimization is unavailable, whereby substantially backwards compatibility with existing communications systems is achieved.

## 42. A system comprising:

2 means, responsive to a multipoint controller 3 receiving a request to extend an invitation to 4 an ongoing conference call to a first terminal, 5 for attempting to establish, via instant 6 messaging services, a Call Optimization 7 Application (COA) channel between a Multipoint 8 Controller-Call Optimization Application (MC-9 COA) and a Call Optimization Application co-10 resident with the first terminal (Terminal-COA). 11

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43. The system of Claim 42, further comprising:
a network server computer having the system; and
said network server computer including at least one
processor and at least one memory

- 1 44. The system of Claim 42, wherein said means for 2 attempting to establish, via instant messaging services, 3 a Call Optimization Application (COA) channel further 4 comprises:
- 5 means for determining that the COA channel cannot be 6 established; and
  - means for informing the multipoint controller that

    Call Optimization is unavailable, whereby

    substantially backwards compatibility with

    existing communications systems is achieved.
  - 45. A method for accepting an invitation to an ongoing conference call, said method comprising: receiving, with a Call Optimization Application coresident with a first terminal (Terminal-COA), an invitation to the first terminal to join an ongoing conference call over a Call Optimization Application (COA) channel

established via instant messaging services; and

- 9 responding to the invitation to join in response to
  10 human user input to an interface activated in
  11 response to the invitation.
  - 46. The method of Claim 45, wherein said receiving, with a Call Optimization Application co-resident with a first terminal (Terminal-COA), an invitation to the first terminal to join an ongoing conference call over a Call
  - 5 Optimization Application (COA) channel established via
  - 6 instant messaging services further includes:

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receiving	a token having at least one field selected
from	the group comprising a token ID field, a
confe	erence ID field, a network address field, a
pass	word field, a call initiator field, and an
othe	r conference call participants' names
field	i.

The method of Claim 45, wherein said receiving,

- 2 with a Call Optimization Application co-resident with a first terminal (Terminal-COA), an invitation to the first 3 terminal to join an ongoing conference call over a Call 4 Optimization Application (COA) channel established via 5 instant messaging services further includes: 6 gathering cost information related to the first 7 8 terminal originating a media transport channel 9 with a multipoint controller; and 10 sending a message containing the cost information
  - 1 48. The method of Claim 45, wherein said responding 2 to the invitation to join in response to human user input 3 to an interface activated in response to the invitation 4 further includes:

COA) over the COA channel.

from the Terminal-COA to a Multipoint-

Controller Call Optimization Application (MC-

- sending a message containing the human user input
  from the Terminal-COA to a MultipointController Call Optimization Application (MCCOA) over the COA channel.
- 1 49. The method of Claim 45, wherein said responding 2 to the invitation to join in response to human user input 3 to an interface activated in response to the invitation 4 further includes:

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activating an interface which presents at least one
invitation option selected from the group
comprising accepting or rejecting an invitation
to join an ongoing conference call, accepting
the invitation to join the ongoing conference
call but rejecting an invitation to originate a
media transport channel, and accepting the
invitation to join the ongoing conference call
and accepting the invitation to originate the
media transport channel.

50. The method of Claim 45, wherein said responding to the invitation to join in response to human user input to an interface activated in response to the invitation further includes:

sending a message indicative of the human user input from the Terminal-COA to a Multipoint

Controller-Call Optimization Application (MC-COA) over the COA channel.

51. The method of Claim 45, wherein said responding to the invitation to join in response to human user input to an interface activated in response to the invitation further includes:

causing, with the Terminal-COA, the first terminal to originate a media transport channel with a multipoint controller and authenticate itself as if it were a "meet-me" conference call, in response to user input indicating that an invitation to join an ongoing conference call has been accepted and that a request that the first terminal originate the media transport channel has been accepted.

52.	The method of Claim 51, further comprising:
the	first terminal authenticating itself by
	presenting token information, received by the
	Terminal-COA from the MC-COA, to the multipoint
	controller.

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1	53. A system comprising:
2	means for receiving, with a Call Optimization
3	Application co-resident with a first
4	terminal (Terminal-COA), an invitation to
5	the first terminal to join an ongoing
6	conference call over a Call Optimization
7	Application (COA) channel established via
8	instant messaging services; and
9	means for responding to the invitation to join
10	in response to human user input to an
11	interface activated in response to the
12	invitation.
1	54. The system of Claim 53, further comprising:
2	a workstation computer having the system; and
3	said workstation computer having at least one
4	processor and at least one memory.
1	55. The system of Claim 53, wherein said means for
2	receiving, with a Call Optimization Application co-
3	resident with a first terminal (Terminal-COA), an
4	invitation to the first terminal to join an ongoing
5	conference call over a Call Optimization Application
6	(COA) channel established via instant messaging services
7	further includes:
8	means for receiving a token having at least one

participants' names field.

The system of Claim 53, wherein said means for

receiving, with a Call Optimization Application co-

field selected from the group comprising a

network address field, a password field, a call

initiator field, and an other conference call

token ID field, a conference ID field, a

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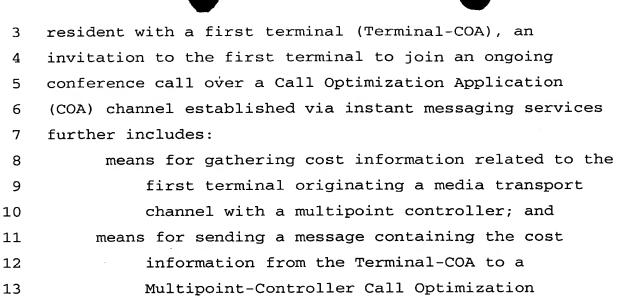
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57. The system of Claim 53, wherein said means for responding to the invitation to join in response to human user input to an interface activated in response to the invitation further includes:

Application (MC-COA) over the COA channel.

means for sending a message containing the human user input from the Terminal-COA to a Multipoint-Controller Call Optimization Application (MC-COA) over the COA channel.

58. The system of Claim 53, wherein said means for responding to the invitation to join in response to human user input to an interface activated in response to the invitation further includes:

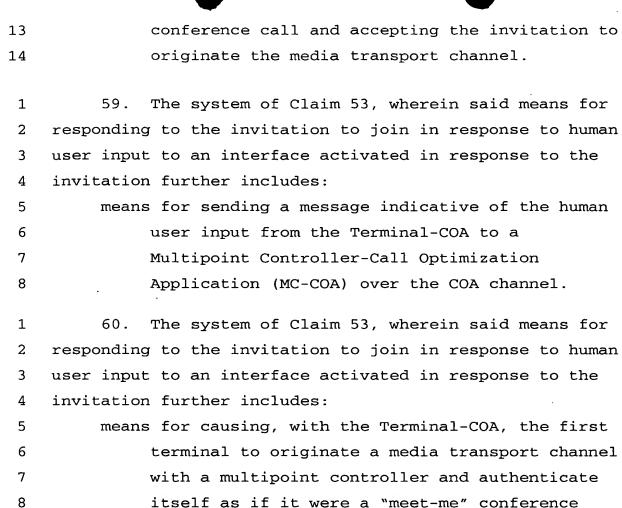
means for activating an interface which presents at 5 least one invitation option selected from the 6 7 group comprising accepting or rejecting an invitation to join an ongoing conference call, 8 9 accepting the invitation to join the ongoing conference call but rejecting an invitation to 10 originate a media transport channel, and 11 12 accepting the invitation to join the ongoing

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1 61. The system of Claim 60, further comprising:
2 means for the first terminal to authenticate itself
3 by presenting token information, received by
4 the Terminal-COA from the MC-COA, to the
5 multipoint controller.

call, in response to user input indicating that

call has been accepted and that a request that

an invitation to join an ongoing conference

the first terminal originate the media

transport channel has been accepted.

Т	92. A program product comprising:
2	signal bearing media bearing program code,
3	responsive to a multipoint controller receiving
4	a request to extend an invitation to an ongoing
5	conference call to a first terminal, for:
6	establishing a Call Optimization Application
7	(COA) channel between a Multipoint
8	Controller-Call Optimization Application
9	(MC-COA) and a Call Optimization
10	Application co-resident with the first
11	terminal (Terminal-COA) following an
12	address resolution;
13	exchanging cost information data between the
14	Terminal-COA and the MC-COA;
15	determining an optimal media transport channel
16	origination strategy in response to the
17	cost information data;
18	sending the Terminal-COA an invitation to join
19	the conference call, said invitation
20	having associated information consonant
21	with the optimal media transport channel
22	origination strategy;
23	receiving, with the MC-COA, a message from the
24	Terminal-COA containing human user input
25	received in response to the invitation to
26	join; and
27	responding to the message containing the human
28	user input.

1 63. The program product of Claim 62, wherein said 2 signal bearing media further includes recordable media.

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1	65. A program product comprising:
2	signal bearing media bearing program code,
3	responsive to a multipoint controller receiving
4	a request to extend an invitation to an ongoing
5	conference call to a first terminal, for
6	attempting to establish a Call Optimization
7	Application (COA) channel between a Multipoint
8	Controller-Call Optimization Application (MC-
9	COA) and a Call Optimization Application co-
10	resident with the first terminal (Terminal-
11	COA).

The program product of Claim 62, wherein said

signal bearing media further includes transmission media.

1 The program product of Claim 65, wherein said 2 signal bearing media is selected from the group 3 comprising recordable media and transmission media.

61. A program product comprising: 1 2 signal bearing media bearing 3 program code for receiving, with a Call Optimization Application co-resident with 4 5 a first terminal (Terminal-COA), an 6 invitation to the first terminal to join 7 an ongoing conference call over a Call 8 Optimization Application (COA) channel; 9 and 10 program code for responding to the invitation 11 to join in response to human user input to 12 an interface activated in response to the

invitation.

1	68. The program product of Claim 67, wherein said
2	signal bearing media further includes:
3	said signal bearing media selected from the group
4	comprising recordable media and transmission
5	media.